



# 25 MAR 2015 Waterfront Meeting

|                          | Speaker         | Topic                  | Time |
|--------------------------|-----------------|------------------------|------|
| MRD-SD                   | CDR Huang       | Welcome/Opening        | 10   |
| Lecture Pretests         |                 |                        | 10   |
| NMCSD<br>Anesthesiology  | Dr. Voogd       | Acute Pain             | 45   |
| Fleet Dental             | CAPT Roncone    | Dental Updates         | 5    |
| Fleet Mental Health      | CDR King-Hollis | FMH Updates            | 5    |
| NEPMU                    | LT Brown        | Outbreak support       | 10   |
| NBCSD                    | HMCS Contreras  | STR/Clinic Updates     | 10   |
| NMCSD General<br>Surgery | Dr. Ignacio     | Acute Surgical Abdomen | 45   |
| MRD-SD                   | LT Lagrew       | Updates                | 5    |
| Lecture Posttests        |                 |                        | 10   |
|                          |                 | Total                  | 150  |



# Pre Test

- Acute pain
- Acute Abdomen
- Curriculum Feedback

Please start on the quiz as soon as you find a seat!

Put your name on the quiz and pass to the end of the row (left) when you are done

## Topics Covered

### **January**

Chest Pain- Dr. Oakley

Triage- LT Feroli

### **February**

Shock- Dr. Mecklenburg

Pulmonary Emergencies- Dr. Powers

### **March**

Acute Pain- Dr. Voogd

Surgical Abdomen- Dr. Ignacio



# Medical Readiness Division

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# Acute Pain

Waterfront Lecture Series



# Disclosures

- I have the following/have no financial interests to disclose.



# Objectives

- Definitions of Pain
- Goals of Pain Management
- Assessment and Re-Assessment of Pain
- Therapeutic Interventions
  - Options
  - Appropriate Tiering of Medications
  - Opioid Management



# Definitions of Pain

- IASP: An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.<sup>1</sup>
- Chronic versus Acute Pain
  - No definitive time range (i.e., 3 months, 6 months)
  - “Pain ... *extending in duration beyond the expected temporal boundary of tissue injury and normal healing*, and adversely affecting the function or well-being of the individual.”<sup>2</sup>
- Cancer versus Non-Cancer Pain
- Nociceptive versus Neuropathic Pain



# Goals of Pain Management

- Patient Comfort and Pain Control
- Function
- Psychological Health
- Physical Health



# Assessment of Pain

- How should pain be assessed?
  - First, ask the patient if they are in pain.
  - NO PAIN → no further assessment is necessary →
  - PAIN further assessment is required (PQRSTA)
    - P – Palliation/Provocation/Psychosocial Impact
    - Q – Quality
    - R – Region/Radiation
    - S – Severity
    - T – Timing
    - A – Associated Symptoms/ADLs Impact



# Pain Assessment Tools

- NRS
  - Numerical Rating Scale
  - Appropriate for most patients > 12 years old
- Wong – Baker Faces
  - Appropriate for patients > 3 years old

**Wong-Baker FACES Pain Rating Scale**

0 NO HURT  
1 HURTS LITTLE BIT  
2 HURTS LITTLE MORE  
3 HURTS EVEN MORE  
4 HURTS WHOLE LOT  
5 HURTS WORST

**0-10 Numeric Pain Intensity Scale**

0 1 2 3 4 5 6 7 8 9 10  
No Pain Mild Pain Moderate Pain Severe Pain Worst Possible



# Pain Assessment Tools

- NPASS
  - Neonatal Pain, Agitation, and Sedation Scale
  - Appropriate for neonates
- CRIES
  - Crying
  - Requires O2 for  $\text{SaO}_2 < 95\%$
  - Increased Vital Signs
  - Expression
  - Sleepless
  - Appropriate for patients 0 - 6 months
- CHEOPS
  - Children's Hospital Eastern Ontario Pain Scale
  - Appropriate for patients 4 months - 17 years
- FLACC
  - Face, Legs, Activity, Cry, Consolability
  - Appropriate for patients 0 - 18 years



# Assessment of Pain

- When should pain be assessed?
  - Any patient encounter in which vital signs are taken
- When should pain be RE-assessed?
  - Upon admission to or discharge from the medical center
  - After all operative or invasive procedures
  - After any significant change in the patient's medical condition
  - After any transfer of patient care or “handoff”
  - After any analgesic intervention



# Documentation of Pain Assessment

- Pain should be documented in the patient's record according to departmental policy
- The following should be clearly stated in the record:
  - Assessment
  - Intervention
  - Reassessment after the intervention



# Therapeutic Options

## **Non-Pharmacologic**

- Basic
  - Reposition
  - Elevation
  - Edema control
- Psychological Therapy
  - Cognitive-Behavioral Therapy
  - Biofeedback
  - Guided Imagery
  - Distraction
- Modalities
  - Cutaneous Stimulation (TENS)
  - Heat or Cold
  - Massage
- Chiropractic Care
  - Manipulation
- Alternative Therapies
  - Acupuncture
  - Healing Touch

## **Pharmacologic**

- NSAIDs, Acetaminophen
- Skeletal Muscle Relaxants
- Anti-Convulsants
- Anti-Depressants
- NMDA Receptor Antagonists
- Topical Agents
- Opioids

## **Interventional**

- Nerve Blocks
- Epidurals
- Epidural Steroid Injections
- Sympathetic Blocks
- Neurolysis

## **Surgical**

- Neurectomies
- Spinal Cord Stimulation
- Intrathecal Pumps



# WHO Analgesic Ladder

|                                      |                                                                                                              |                                                                                                                                                     |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Step 1<br>Non-opioid<br>+/- adjuvant | Step 2<br>"Mild opioid" for<br>mild-moderate pain<br>+/- non-opioid +/-<br>adjuvant<br><br>Tramadol, Codeine | Step 3<br>"Strong opioid" for<br>severe pain +/- non-<br>opioid +/- adjuvant<br><br>Hydrocodone, Morphine,<br>Oxycodone,<br>Hydromorphone, Fentanyl |
|                                      |                                                                                                              |                                                                                                                                                     |



# NSAIDs

- Ibuprofen – up to 3200mg/day divided TID to QID.
- Naprosyn – up to 1500mg/day divided BID to TID for no longer than 6 months.
- Aspirin – up to 4g/day divided 4-6X per day.
- HIGHLY suggest concomitant H2 and/or PPI
- H2 – Ranitidine, Famotidine
- PPI – Omeprazole, Esomeprazole



# Ordering of PRN Medications

- When > 1 PRN medication is ordered ...
  - Must include the intended indication for each use and a maximum 24 hour dose
  - Example:
    - I want my patient to be administered Motrin for mild pain, Percocet for moderate pain, and IV Dilaudid for severe pain.
    - Correct orders:
      - Motrin 800mg PO q 8 hours PRN mild pain (VAS 1-3)
      - Percocet (5mg/325mg) one tab PO q 6 hours PRN moderate pain (VAS 4-6) (maximum of 4 tablets in 24 hours)
      - Dilaudid 0.2 mg IV q 3 hours PRN severe pain (VAS 7-10) (maximum of 1.6 mg in 24 hours)
    - Incorrect orders:
      - Motrin 800mg PO q 8 hours PRN pain
      - Percocet (5mg/325mg) one tab PO q 6 hours PRN pain
      - Dilaudid 0.2 mg IV q 3 hours PRN pain



# Acetaminophen

- Up to 4g per day divided Q4-6 hours for males greater than 70kg.
- Up to 3g per day divided Q4-6 hours for females or males less than 70kg.



# Partial Agonists

- Tramadol – 50mg to 100mg po Q4H – Q6H
- Do NOT exceed 8 tabs total per day for any period of time. Recommend no more than 5 per day long-term.



# Weak Opioids DEA Schedule III

- Tylenol 3 (30/300)  $\frac{1}{2}$  to 2 tabs po q4h (do not exceed 3g/day tylenol total dose for males less than 70kg or females).
- May not work well in up to 20% of the population due to low CYP450 2D6 enzyme which is required for codeine's conversion into the active drug morphine



# Potent Opioids DEA Schedule II

- Hydrocodone (Vicodin 3/300)
- Take 1-2 tabs every 4-6 hours DO NOT exceed 10 tabs per day in females or males under 70kg
  
- Oxycodone (Percocet 5/325)
- Take 1-2 tabs every 4-6 hours DO NOT exceed 10 tabs per day in females or males under 70kg



# IV/IM medications for Acute Severe Pain

CONSTANTLY MONITOR THESE PATIENTS VISUALLY AS WELL AS WITH SPO2 (PULSE OX). THEY WILL OFTEN STOP BREATHING FOR MINUTES BEFORE THEY START DESATURATING AND THE SPO2 WARNS YOU!!!

End point is patient reporting tolerable pain but should still not go below a normal respiration rate (adult 8-12 times per minute).



# ✓/IM medications for Acute Severe Pain

- Fentanyl Citrate–
  - moderate to severe pain
  - IVP 25-50 mcg every 5 minutes until patient more comfortable.
  - IM 50-100 mcg every 10 minutes until patient more comfortable.
- SEVERE unremitting pain
  - IVP 50-100 mcg every 5 minutes until patient more comfortable.
  - IM 50-100 mcg every 10 minutes until patient more comfortable.



# IV/IM medications for Acute Severe Pain

- Morphine Sulfate –
  - moderate to severe pain
  - IVP 1-4mg every 10 minutes until patient more comfortable.
  - IM 2-5mg every 20 minutes until patient more comfortable.
- SEVERE unremitting pain
  - IVP 5-10mg every 10 minutes until patient more comfortable.
  - IM 5-10mg every 20 minutes until patient more comfortable.



# V/IM medications for Acute Severe Pain

- Hydromorphone–
  - moderate to severe pain
  - IVP 0.5 - 1mg every 15 minutes until patient more comfortable.
  - IM 1-2mg every 30 minutes until patient more comfortable.
- SEVERE unremitting pain
  - IVP 1-2 mg every 10 minutes until patient more comfortable.
  - IM 5-10mg every 20 minutes until patient more comfortable.



# IV/IM medications for Acute Severe Pain

- Ketamine– (Safest and most powerful)
  - moderate to severe pain
  - IVP 5-10mg every 3-5 minutes until patient more comfortable.
  - IM 25-50 mg every 10 minutes until patient more comfortable.
- SEVERE unremitting pain
  - IVP 10-20 mg every 3-5 minutes until patient more comfortable.
  - IM 50-100mg every 10 minutes until patient more comfortable.



## IV/IM medications for Acute Severe Pain

- **Ketamine**– Can cause significant dysphoria at low doses (10-50mg range). Consider adding midazolam 1-2mg IV or IM (10mg PO) or Ativan 1-2mg IV or IM.
- At higher doses (1-2mg/kg IV) causes significant dissociative anesthesia.
- **UNLESS COMBINED with opioids WILL CAUSE ALMOST NO RESPIRATORY DEPRESSION** and is useful in patients with SHOCK.



# Time and Dose Ranges

- Time ranges with PRN medications are not allowed
- Example:
  - I want my patient to have IV Morphine for pain as needed
  - Correct orders:
    - Morphine 2 mg IV q 3 hours PRN pain
  - Incorrect orders:
    - Morphine 2 mg IV q 2-4 hours PRN pain
- Dose Ranges should be treated as Tiered:
  - I want my patient to have 2-4 mg of IV Morphine for pain as needed.
  - Correct orders:
    - Morphine 2 mg IV q 3 hours PRN mild pain (VAS 1-3)
    - Morphine 3 mg IV q 3 hours PRN moderate pain (VAS 4-6)
    - Morphine 4 mg IV q 3 hours PRN severe pain (VAS 7-10)
    - Maximum of 32 mg in 24 hours
  - Incorrect orders:
    - Morphine 2-4 mg IV q 3 hours PRN pain



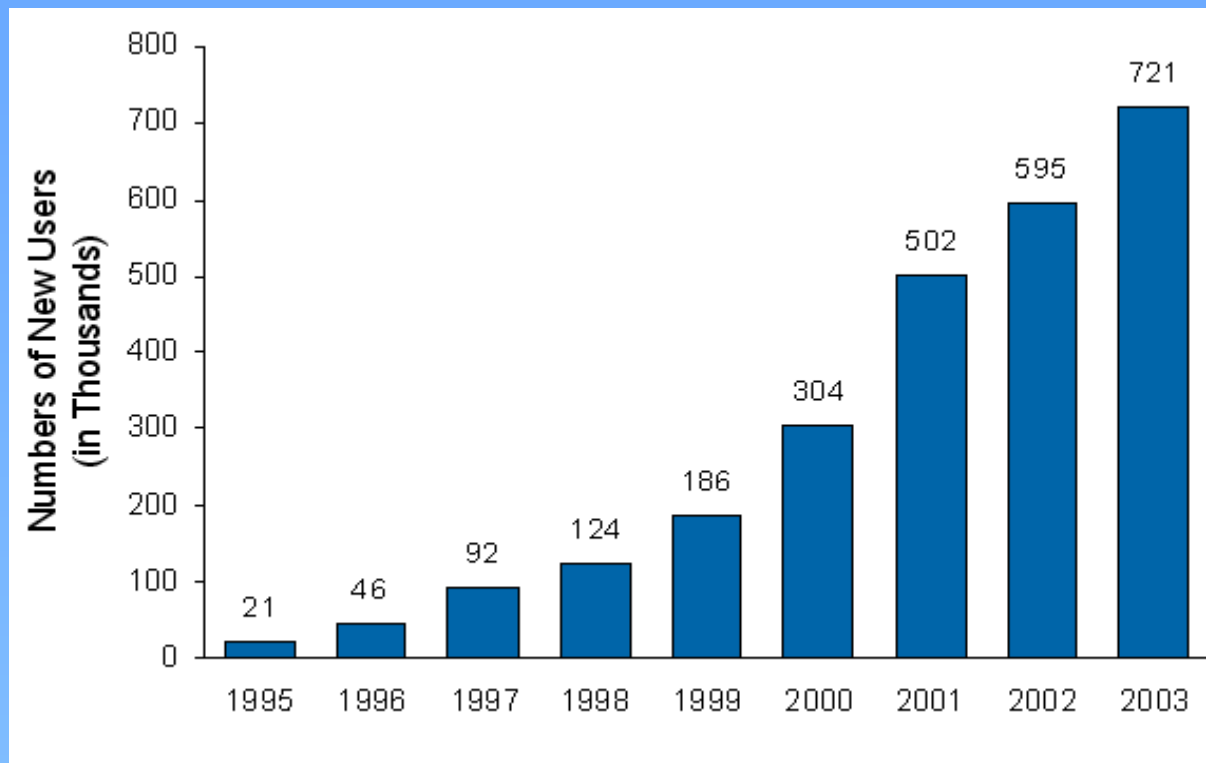
# Opioids for Chronic Non-Cancer Pain

- Necessity for Close Monitoring
- NMCP Instruction for Prescriptions and Monitoring
  - Long Term Controlled Substance Therapy Informed Consent/Agreement Form
  - Urine Drug Testing
  - Periodic Review
  - Aberrant Behavior



# Necessity for Strict Monitoring

- Opioid Prescribing Practices

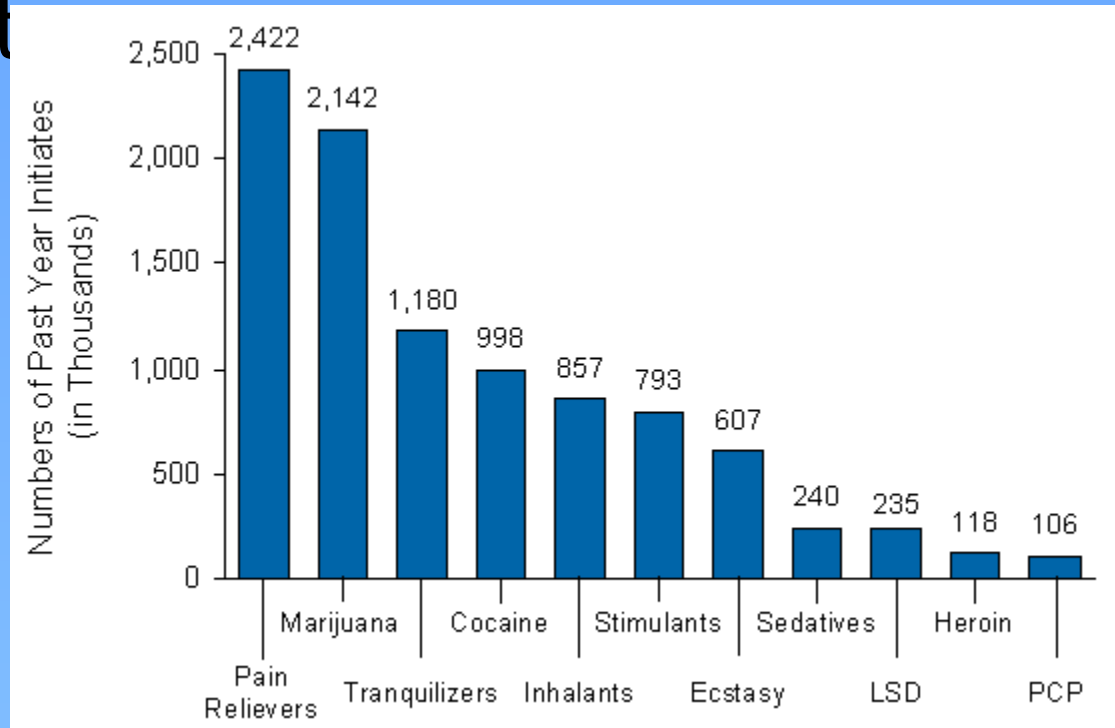


Annual Numbers of New Users of  
OxyContin®<sup>3</sup>



# Necessity for Strict Monitoring

- Opioids are top “illicit” drugs for new initiates

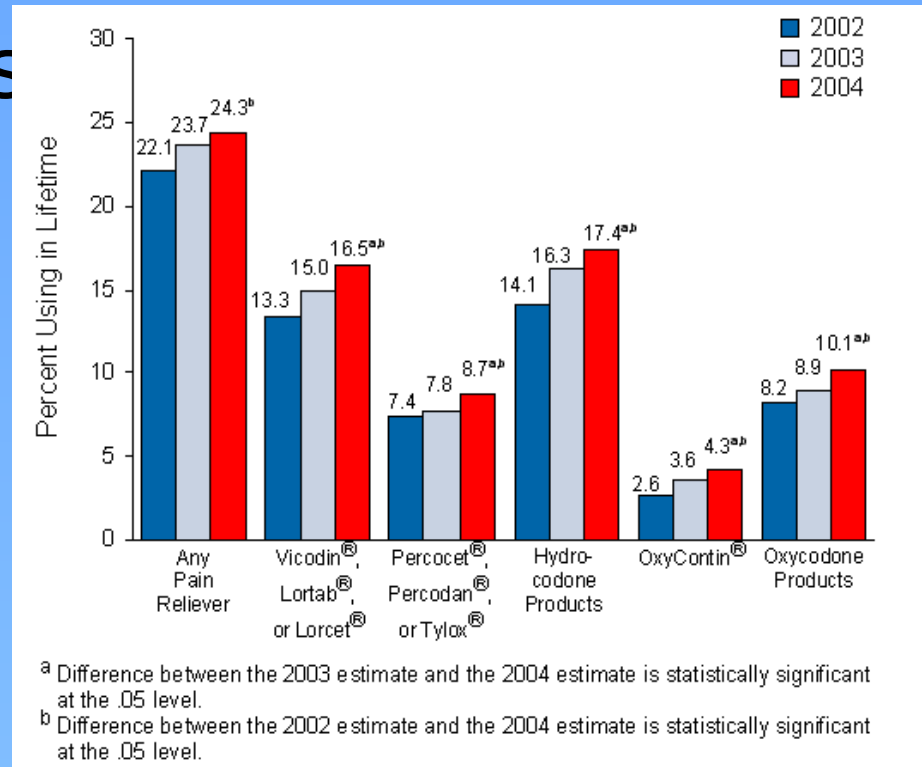


Initiates for Illicit Drug Categories (2004)<sup>3</sup>



# Necessity for Stricter Monitoring

- Nearly 1/4 of young adults have used pain relievers for non-medical purposes



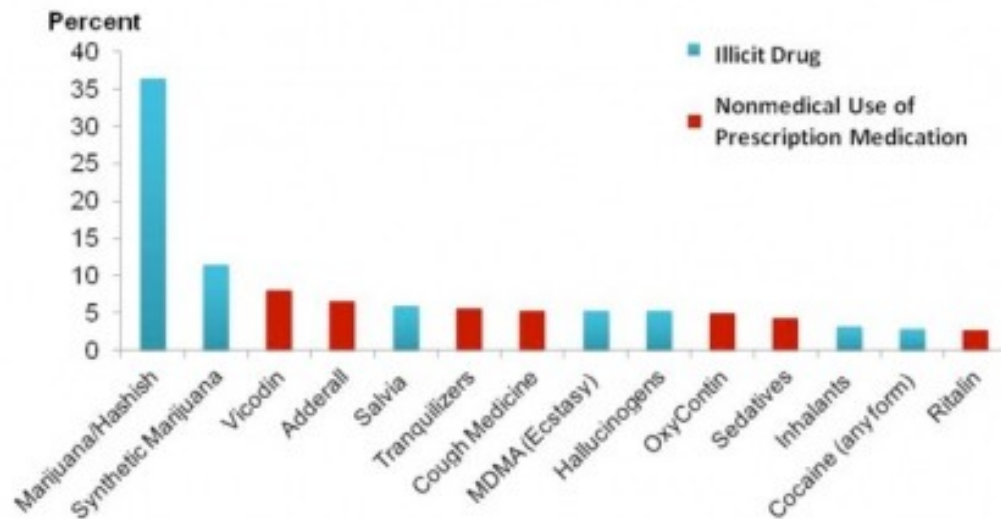
Lifetime Nonmedical Use of Selected Pain Relievers among Young Adults<sup>3</sup>



# Necessity for Stricter Monitoring

- Opioids are the #3 most abused drug by 12<sup>th</sup>

After Cannabis, Nonmedical use of Prescription and Over-the-Counter Medications Account for Most of the Commonly Abused Drugs in 12<sup>th</sup> Graders (*in the past year*)



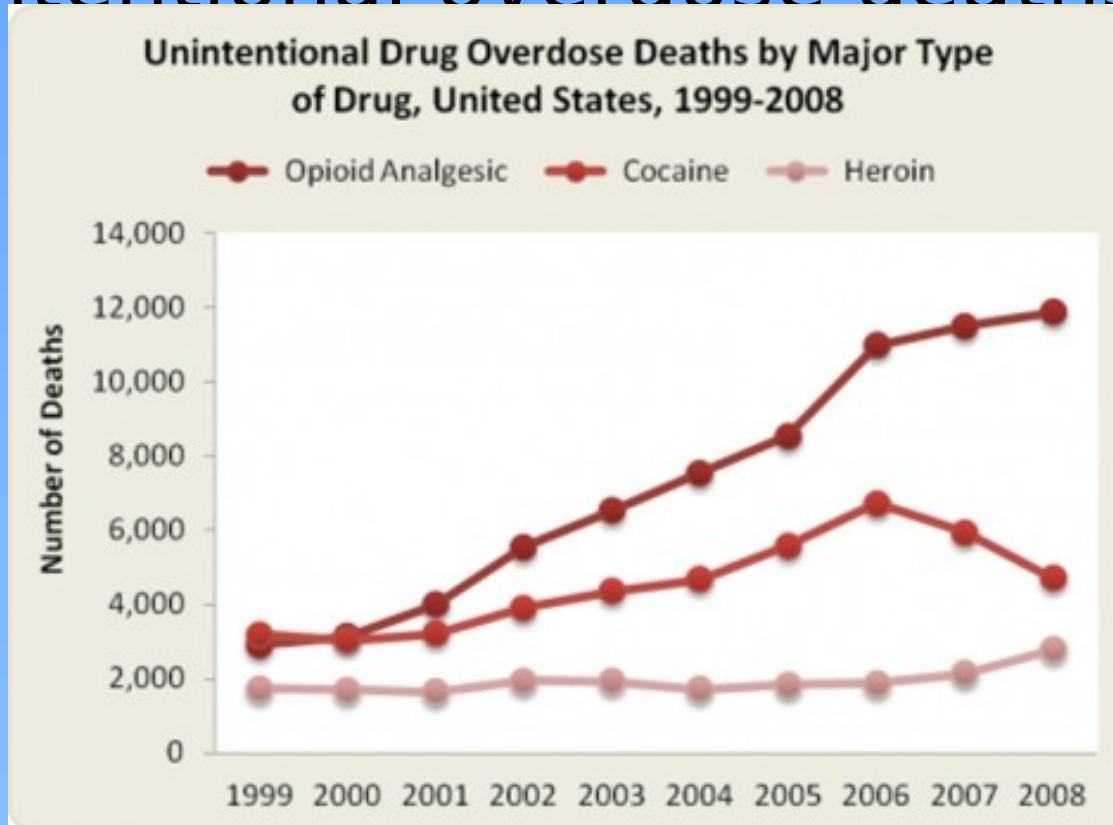
Categories are not mutually exclusive  
SOURCE: University of Michigan, 2011 Monitoring the Future Study

Drugs Abused by 12<sup>th</sup> Grade Students in the U.S. (2011)<sup>4</sup>



# Necessity for Stricter Monitoring

- Opioids are the #1 cause of unintentional overdose deaths



Unintentional Drug Overdose Deaths<sup>4</sup>



# Necessity for Stricter Monitoring

- State Medical Boards' Guidelines
  - Differ by each state
  - In general, they share common principles:
    - Patient evaluation
    - Development of a treatment plan
    - Informed consent and agreement to treat
    - Periodic review
    - Consultation when necessary
    - Accurate and complete medical records
- To view each state's guidelines, go to:
  - [www.medscape.com/resource/pain/opioid-policies](http://www.medscape.com/resource/pain/opioid-policies)



# Guidelines for Management

**VA/DoD CLINICAL PRACTICE GUIDELINE FOR  
MANAGEMENT OF  
OPIOID THERAPY FOR CHRONIC PAIN**

**Department of Veterans Affairs  
Department of Defense**

Prepared by:

**The Management of Opioid Therapy for Chronic Pain Working Group**

With support from:

**The Office of Quality and Performance, VA, Washington, DC  
&**

**Quality Management Division, United States Army MEDCOM**

**May 2010**



# NMCSD Instruction

- Upon initiation of a regular opioid regimen for chronic non-cancer pain ...
  - A lengthy and frank discussion of benefits and risks of long term opioid therapy should take place... i.e., informed consent.
  - Patients and providers will sign a “Long Term Controlled Substance Therapy Informed Consent/Agreement”
    - Available on NMCP’s Pharmacy Website
  - A urine drug test (UDT) will be administered.
  - Specific goals of therapy will be set.
    - Not necessarily pain elimination or reduction...
    - Focus on *self-efficacy, improved function and activities of daily living.*
  - Consider having the patient complete a Screener and Opioid Assessment for Patients with Pain (SOAPP-R).
    - Assessment for patients’ relative risk of developing problems
  - Consider Current Opioid Misuse Measure (COMM), random pill counts and UDTs for ongoing monitoring.



# Long Term Controlled Substance Therapy Informed Consent and Agreement

- Key Points

- Risks – side effects, tolerance, dependence, addiction, risks to unborn children
- *Single provider* or clinic to prescribe
- Use of *NMCSD branch or clinic pharmacies only*
- Random UDTs, pill counts, etc. may occur
- Provider can receive information from the pharmacy (PDTS) and California Rx Monitoring Database (CURES - PDMP) about medication use
- <http://oag.ca.gov/cures-pdmp>
- Agreement to be seen by other specialists
- Failure to comply can result in termination of opioid therapy; also lack of efficacy or attributable harm



# Urine Drug Testing

- Done as a specialty mail-out lab
- Sample obtained and mailed from your clinic
- Meant to serve strictly as a *monitoring tool* for adherence and compliance
  - There is no “chain of custody”
- Many companies provide this service (no specific company sanctioned by DOD/VA)
- Tests for:
  - Multiple synthetic opioids
  - Urine opioids levels to monitor compliance
  - Other drugs (e.g., TCAs, AEDs, other adjuvants)
- Billed directly to Tricare for costs



# Follow-Up and Re-Assessment

- Patients MUST be seen at MINIMUM of every 3 months
- Prescription supply can be for 1 month AT MOST
- Each follow-up patient encounter or telephone consult for refills should include an assessment and documentation of the 4 A's:
  - Activities of Daily Living
  - Analgesia
  - Adverse Effects
  - Aberrant Behavior



# Aberrant Behavior

- Examples:
  - Non-adherence to treatment plan
  - Evidence of misuse, abuse or addiction
- Options
  - Warning
  - *More frequent follow-up visits and screenings*
  - Consultation (pain medicine, addiction medicine, psychology or psychiatry, case management, etc.)
  - Notify **Prescription Drug Misuse Subcommittee**
  - Placement in structured facility (SNF, assisted living)
  - Cessation of opioid therapy
    - Consult addiction medicine – detox (SARP) if indicated



# Navy Comprehensive Pain Management Program

- NAVMEDWest Lead: CDR Steven Hanling, MC, USN
- R4 Teams at NMCSD and branch clinics
  - Integrative medicine physician, Physical therapist, Case manager (RN), Research coordinator (RN)
- Regional R4 Subspecialty Teams at MTFs
  - Pain physician (fellowship-trained), Addiction medicine physician, Clinical nurse coordinator (RN), Acupuncturist
- TeleHealth – monthly Pain ECHO lectures
  - 1<sup>st</sup> Thursday of every month, 12:00 – 13:00 via VTC



# MCSD Pain Medicine Clinic

- What do we offer?
  - Multidisciplinary Pain Management
  - Interventional Pain Procedures
  - Available for consultation for medication management for complicated patients
    - Both outpatient and inpatient
- What don't we do?
  - Narcotic dispensing clinic for the Tricare Region
  - Accept consults from patients without primary care physicians
  - Addiction Medicine



# NMCSD Anesthesia Acute Pain Service

- What do we offer?
  - Consultation for difficult inpatient acute pain management
    - PCA and medication management
    - Ketamine infusions
  - Neuraxial and Regional Anesthesia
    - Single “shot” blocks
    - Continuous infusion techniques
  - Blood patches for post-dural puncture headaches
- What don't we do?
  - Routine medication and PCA management for acute pain



# References

- Cited References:

1. Benzon H. L. Raj's Practical Management of Pain, 4th Edition, Mosby, Inc. 2008
2. Practice Guidelines for Chronic Pain Management – An Updated Report by the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. Anesthesiology 2010; 112:810-33.
3. Aldworth J., et al. Overview of Findings from the 2004 National Survey on Drug Use and Health. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. September 2005. Available online at <http://samhsa.gov/data>
4. National Institute on Drug Abuse. Topics in Brief, December 2011. Available online at < <http://www.drugabuse.gov/publications/topics-in-brief/prescription-drug-abuse> >
5. Joint Commission on Accreditation of Healthcare Organizations, 2000. Pain Assessment and Management: An Organizational Approach. Oakbrook Terrace, IL
6. Practice Guidelines for Cancer Pain Management – A Report by the American Society of Anesthesiologists Task Force on Pain Management, Cancer Pain Section. Anesthesiology 1996;84:1243-57.
7. Model Policy for the Use of Controlled Substances for the Treatment of Pain, Guidance Document: 85-24, Virginia Board of Medicine, Adopted June 24, 2004
8. VA/DOD Clinical Practice Guideline for the Management of Opioid Therapy for Chronic Pain. Veterans Health Administration, Department of Defense. VA/DOD Clinical Practice Guideline for the Management of Opioid Therapy for Chronic Pain. Washington (DC): Veterans Health Administration, Department of Defense; 2010 May



# Post Test- Version A

1 - Identify the FALSE statement:

A) Maximum daily dose of ibuprofen is 4 grams

B) Ibuprofen – up to 3200mg/day divided TID to QID

C) Naprosyn – up to 1500mg/day divided BID to TID for no longer than 6 months.

D) Aspirin – up to 4g/day divided 4-6X per day.



# Post Test – Version A

1 - Identify the FALSE statement:

**A) Maximum daily dose of ibuprofen is 4 grams**

B) Ibuprofen – up to 3200mg/day divided TID to QID

C) Naprosyn – up to 1500mg/day divided BID to TID for no longer than 6 months.

D) Aspirin – up to 4g/day divided 4-6X per day.



# Post Test – Version A

2 - Which medication is LEAST likely to cause respiratory depression?

A) Fentanyl Citrate

B) Hydromorphone

C) Ketamine

D) Morphine Sulfate



# Post Test – Version A

2 - Which medication is LEAST likely to cause respiratory depression?

A) Fentanyl Citrate

B) Hydromorphone

**C) Ketamine**

D) Morphine Sulfate



# Post Test – Version A

3 – Which medication class has the highest risk of causing GI distress/ulcers?

A) Benzodiazepines

B) Central acting non-opioid (e.g. Tylenol)

C) NSAIDs

D) Opioids



# Post Test – Version A

3 – Which medication class has the highest risk of causing GI distress/ulcers?

A) Benzodiazepines

B) Central acting non-opioid (e.g. Tylenol)

**C) NSAIDs**

D) Opioids



# Post Test – Version A

4 – Which of the following PRN orders are written correctly?

- A. Morphine 2 mg IV q 3 hours PRN pain
- B. Morphine 2 mg IV q 2-4 hours PRN mild pain (VAS 1-3)
- C. Morphine 4 mg IV q 3 hours PRN severe pain (VAS 7-10)
- D. Morphine 2 mg IV q 2-4 hours PRN pain

A) A,B, and C

B) B and C

C) A and D

D) A and C

E) A,B,C, and D



# Post Test – Version A

4 – Which of the following PRN orders are written correctly?

- A. Morphine 2 mg IV q 3 hours PRN pain
- B. Morphine 2 mg IV q 2-4 hours PRN mild pain (VAS 1-3)
- C. Morphine 4 mg IV q 3 hours PRN severe pain (VAS 7-10)
- D. Morphine 2 mg IV q 2-4 hours PRN pain

A) A,B, and C

B) B and C

C) A and D

**D) A and C**

E) A,B,C, and D



# Post Test – Version B

1 – Which of the following medications are controlled substances?

- A) Fentanyl Citrate
- B) Hydromorphone
- C) Ketamine
- D) Tramadol

A) A,B, and C

B) B and C

C) A and D

D) A and C

E) A,B,C, and D



# Post Test – Version B

1 – Which of the following medications are controlled substances?

- A) Fentanyl Citrate
- B) Hydromorphone
- C) Ketamine
- D) Tramadol

A) A,B, and C

B) B and C

C) A and D

D) A and C

**E) A,B,C, and D**



# Post Test – Version B

2 - Which medication is LEAST likely to cause respiratory depression?

- A) Fentanyl Citrate
- B) Hydromorphone
- C) Ketamine
- D) Morphine Sulfate



# Post Test – Version B

2 - Which medication is LEAST likely to cause respiratory depression?

A) Fentanyl Citrate

B) Hydromorphone

**C) Ketamine**

D) Morphine Sulfate



# Post Test – Version B

- 3- Which of the following PRN orders are written correctly?
- A. Morphine 2 mg IV q 3 hours PRN pain
  - B. Morphine 2 mg IV q 3 hours PRN mild pain (VAS 1-3)
  - C. Morphine 4 mg IV q 3 hours PRN severe pain (VAS 7-10)
  - D. Morphine 2 mg IV q 2-4 hours PRN pain

A) A,B, and C

B) B and C

C) A and D

D) A and C

E) A,B,C, and D



# Post Test – Version B

- 3- Which of the following PRN orders are written correctly?
- A. Morphine 2 mg IV q 3 hours PRN pain
  - B. Morphine 2 mg IV q 3 hours PRN mild pain (VAS 1-3)
  - C. Morphine 4 mg IV q 3 hours PRN severe pain (VAS 7-10)
  - D. Morphine 2 mg IV q 2-4 hours PRN pain

**A) A,B, and C**

B) B and C

C) A and D

D) A and C

E) A,B,C, and D



# Post Test – Version B

4- Which of the following **MUST** be performed if prescribing controlled substances for pain control?

A) Patients **MUST** be seen at **MINIMUM** of every 3 months

B) Prescription supply can be for 1 month **AT MOST**

C) Each follow-up patient encounter or telephone consult for refills should include an assessment and documentation of the 4 A's: Activities of Daily Living, Analgesia, Adverse Effects, Aberrant Behavior

D) All the above



# Post Test – Version B

4- Which of the following **MUST** be performed if prescribing controlled substances for pain control?

A) Patients **MUST** be seen at **MINIMUM** of every 3 months

B) Prescription supply can be for 1 month **AT MOST**

C) Each follow-up patient encounter or telephone consult for refills should include an assessment and documentation of the 4 A's: Activities of Daily Living, Analgesia, Adverse Effects, Aberrant Behavior

**D) All the above**



# Credits

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Editors: Erik P. Voogd, M.D.



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# Fleet Mental Health

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# NAVSTA Branch Medical Clinic

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Senior Enlisted Leader

Naval Branch Health Clinic NAVSTA

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# Old Business

- Upcoming Mind Body Medicine
  - Next class is April 9-10 at NMCSD Chapel Fellowship Hall
  - Register with CDR Millegan ([Jeffrey.millegan@med.navy.mil](mailto:Jeffrey.millegan@med.navy.mil))
  - 14 AMA PRA Category 1 CME available for 2 day session





# Old Business

- LARC Clinic
  - Must have attended the Oct IUD/nexplanon training
  - Must attend 2 days for certification of both
  - Email Dr. Marengo to reserve a clinic day  
[antoINETte.marengo@med.navy.mil](mailto:antoINETte.marengo@med.navy.mil)
  - Open dates (1300 at Balboa OB/GYN clinic)
    - May 13, 20, 27
- Next training opportunity ✉ April 3<sup>rd</sup> (talk to me after the meeting if interested)



# Old Business

## Primary Care Symposium

Friday May 8, 2015

Naval Medical Center San Diego

### "Building the Foundation of Medical Care for the Fleet and Families"

#### Welcome from the director:

On behalf of the Department of Medicine, I would like to welcome you to the Sixth Annual Primary Care Symposium at the Naval Medical Center San Diego! We have been working hard to arrange a stimulating and pertinent series of lectures directed toward busy primary care providers. We hope the discussions today will answer difficult clinical questions and assist in daily care of your patients.

Your feedback at the end of the meeting is very important to us. Please complete your evaluations and let us know where we can make improvements for next year.

LCDR Mark P. Tschanz MC, USN  
Course Director

#### Program Learning Objective:

Provide current evidence based review on fundamental primary care topics to aide in providing outstanding care to the fleet and families.

## Topics

**CAPT (ret) John Kelso:** A practical guide to adult immunizations: Who needs what, when and why?

**LCDR Grant Kidd:** Headache in Primary Care

**CAPT Thomas Robinson:** Clinical Indications for the Use of Hyperbaric Oxygen

**CDR Ryan Maves:** Methicillin-resistant *Staphylococcus aureus* and soft tissue infections

**CDR Dylan Wessman:** Exercise for Heart Health: How Much is Enough?

**LCDR Leah Spring:** Operational Dermatology

**Stump the Specialist:** Primary Care Approach to Common Sub-specialty Questions

And — don't miss the expo!

**Target Audience:** All Primary Care Providers - to include physicians, physician's assistants (PA), nurse practitioners (NP), independent duty corpsmen (IDC)

**Program Sponsor:** Department of Medicine

**Location:** Naval Medical Center San Diego Auditorium; Bldg 5, 1<sup>st</sup> deck.

**Date:** Friday, 8 May 2015; 0700-1530

**Fees:** None

**Required:** Government ID for access to base

**Attire:** Military - Uniform of the day; Civilian - Business attire.

**Parking at NMCS D Hospital Facility:** Participants are encouraged to Arrive Early for parking.

**CME:** Pending approval 7 hours CME

**Registration:** <http://www.med.navy.mil/sites/nmcsd/Pages/Staff/Primary-Care-Symposium.aspx>

Can also register by emailing course director (mark.tschanz@med.navy.mil)



<http://www.med.navy.mil/sites/nmcsd/Pages/Staff/Primary-Care-Symposium.aspx>



# Active Duty Clinic-Gen Surgery

- Director, MRD CDR Hoang has volunteered to see common general surgery pathology on Fridays at Dept of Surgery, NMCSO to fast track fleet referrals, including:
  - Soft tissue (lipoma, epidermal inclusion cyst, pilonidal cyst);
  - Anal disease (hemorrhoid, anal/rectal abscess);
  - Screening colonoscopy
  - Symptomatic cholelithiasis
  - Hernia (ventral, incisional, inguinal, umbilical)
- Gen surg matrix referral rules still apply.
- Conditions requiring long term follow up will not be included in active duty clinic, unless discussed with MRD Physician Supervisors.
- Include “forward to Dr. Hoang” in body of the referral.

# Surgical Abdomen

Waterfront Lecture Series



# Disclosures

- I have the following/have no financial interests to disclose.

# Personal Biography

- Board certified
  - General Surgery (5%)
  - Pediatric Surgery (95%)
- Entered the Navy as HPSP candidate
- General Surgery training – WRNNMC/NMCP
- Pediatric Surgery Research – Cincinnati Children's Hospital Medical Center
- Pediatric Surgery – University of Louisville, KY
- Research Interests – surgical education, humanitarian care and disaster relief, neonatal surgery, chest wall deformities, pediatric trauma
- Served as GMO at Okinawa, Japan, Surgeon – USNH Yokosuka, USS Kitty Hawk, USS Ronald Reagan, USNS Mercy, USNH – Naples
- Staff Pediatric Surgeon – Naval Medical Center San Diego
- Program Director, General Surgery
- Almost 18 years in the Navy!





# Objectives

- Review differential diagnoses of abdominal pain based on location and history.
- Discuss the evaluation and treatment of abdominal pain.
- Provide clinical scenarios to reinforce learning objectives
- List common problems and pitfalls in treating patients with possible abdominal surgical conditions.
- When to call a surgeon?

# Military versus Civilian Patients

## ➤ Civilian

- Wide range (children to elderly)
- Higher likelihood for co-morbidities (obesity)
- Less likely to seek medical care due to high cost of care
- Male=Female
- Elderly diseases – cancers, diverticulitis, aneurysms are more likely

## ➤ Active Duty Military

- Age 17-50s
- Tend to be healthy with less co-morbidities
- Annual physical exam
- Less likely to seek care if affects their career (ie-recruits)
- Male>Female
- **PITFALL - Elderly diseases are LESS likely, but still need to be considered for military patients**

# Clinical Case #1

21 y.o. male on the ship presents with epigastric pain x 2 days that has now migrated to the RLQ. Mild nausea and anorexia, but no fevers, emesis or diarrhea. He has significant tenderness to RLQ and a normal hernia and genitourinary exam. Rectal exam is normal. CBC and UA are normal. What is your next step?

- A. Ultrasound
- B. CT scan of the abdomen
- C. Observation for 24 hours and repeat CBC in the am
- D. Surgical consultation

# Differential Diagnosis based on Abdominal Location



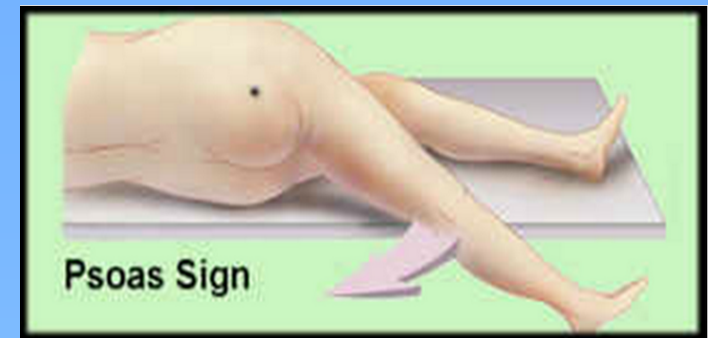
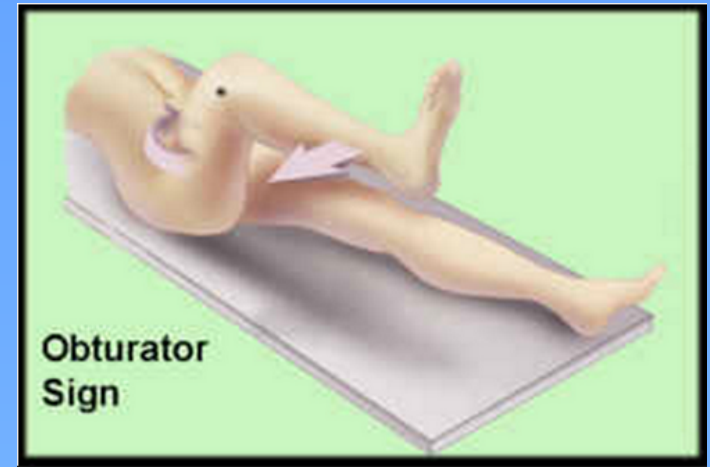
# Acute Appendicitis

## ➤ Signs & Symptoms

- 2-3 days of symptoms (may be longer if perforated)
- Pain before nausea, vomiting and anorexia
- Low grade fever (high fevers ✉ possible perforation)
- Epigastric ---> RLQ pain
- MAY have diarrhea or urinary symptoms

## ➤ Physical Exam

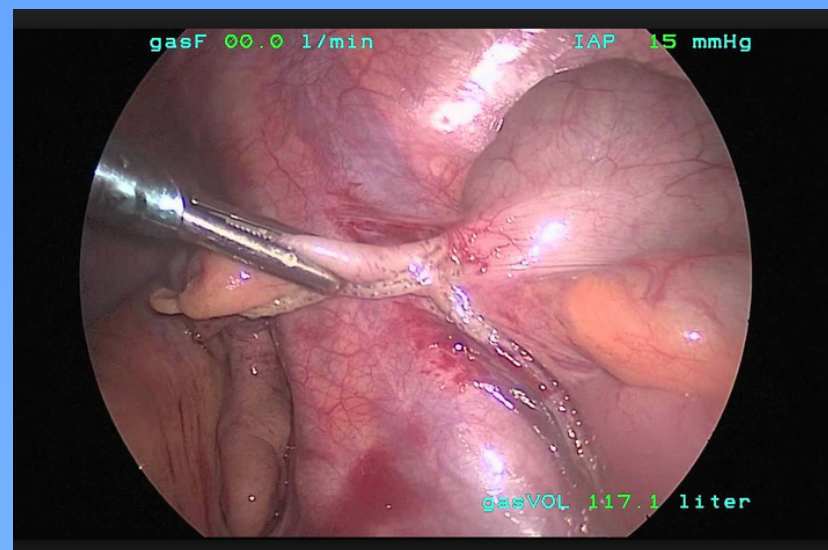
- RLQ tenderness
- Positive Rovsing, Psoas, Obturator or Psoas signs
- Rectal exam may have tenderness if appendix is in the pelvis
- Peritoneal signs - heel-tap test, involuntary/voluntary guarding



# Acute Appendicitis

## ➤ DDx

- Gastroenteritis/Constipation
- Inguinal hernia (palpable bulge)
- Testicular torsion (acute pain)
- Ovarian pathology (torsion will have acute onset, pregnancy)
- Crohn's disease (bloody stools)



## ➤ Management

- CBC, CRP, Chemistry panel
- Surgical Consultation
- US/CT scan (if needed!)
- BUT it is clinical diagnosis

# Clinical Case #2

18 y.o. female presents with acute RLQ for the last 6 hours. Severe nausea, vomiting and anorexia, but no fevers or diarrhea. Last menses was 2 weeks ago. She has significant tenderness to RLQ and a normal hernia. Rectal exam is normal. Right adnexal tenderness. WBC is 14 and UA are normal. UHCG is normal. What is your next test?

- A. Serum HCG
- B. CT scan of the abdomen
- C. Observation for 24 hours but treat with Motrin
- D. Ultrasound of the pelvis

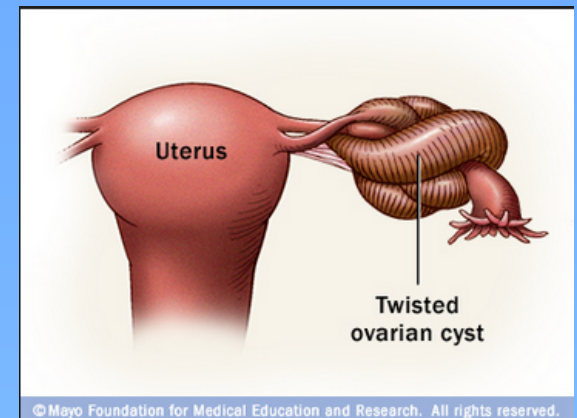
# Ovarian Torsion

## ➤ Signs & Symptoms

- Sudden onset of unilateral lower abdominal pain
- Nausea and vomiting.
- History of prior ovarian cyst or mass, prior ovarian torsion, or current pregnancy (ie, corpus luteum cyst) should increase your suspicion for torsion.

## ➤ Physical Exam

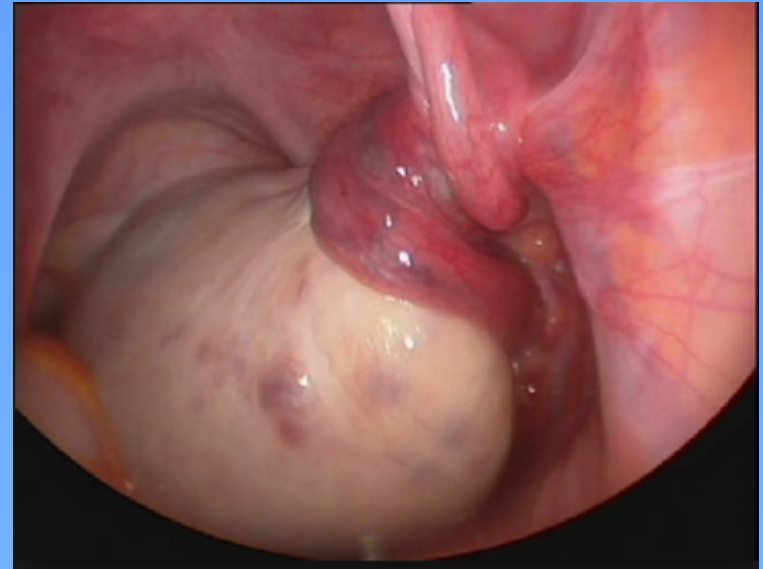
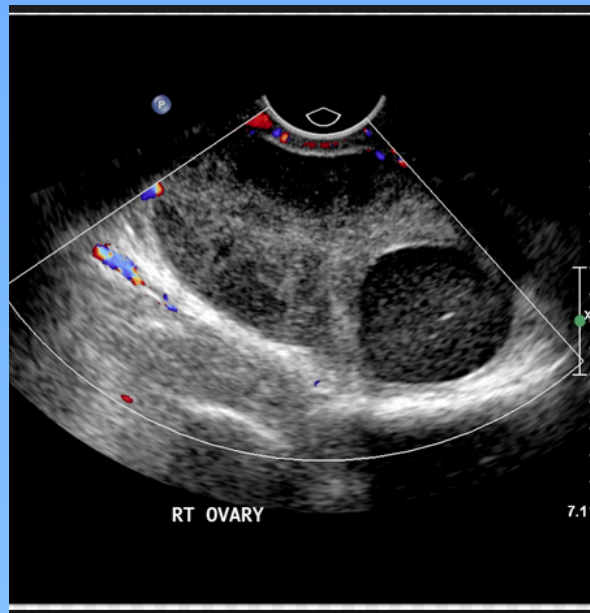
- Fever is uncommon, and usually low-grade if present.
- Lower abdominal tenderness.
- On pelvic exam, the patient may have adnexal tenderness or an adnexal mass.



# Ovarian Torsion

## ➤ DDx

- Ovarian cyst
- Tubo-ovarian abscess
- Ectopic pregnancy
- Appendicitis
- Kidney stone



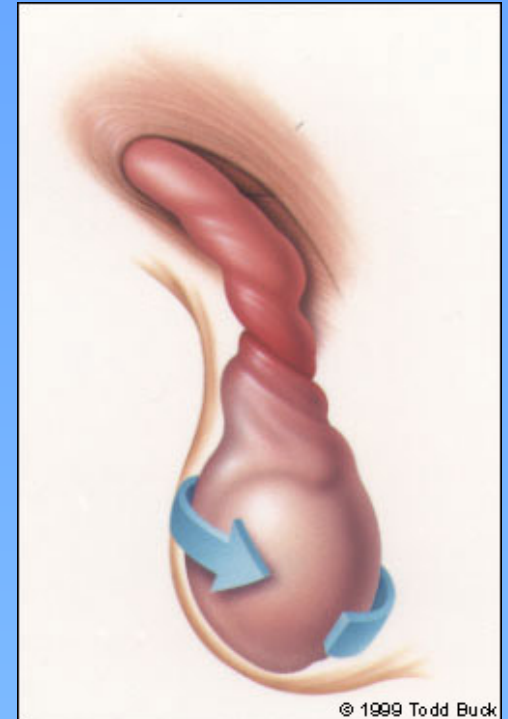
## ➤ Management

- CBC, UA, Urine HCG
- **ALL females must obtain an pregnancy test!**
- US of pelvis
- CT scan (if needed!)
- Referral to ER or OB/GYN

# Testicular Torsion

## ➤ Signs & Symptoms

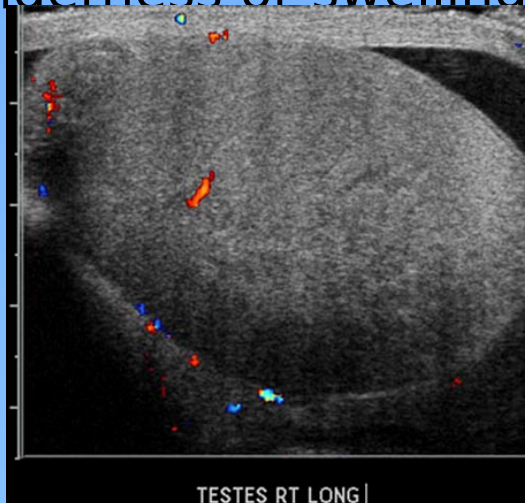
- Sudden, severe pain in the scrotum — the loose bag of skin under your penis that contains the testicles
- Swelling of the scrotum
- **Abdominal pain**
- Nausea and vomiting
- A testicle that's positioned higher than normal or at an unusual angle
- Painful urination
- Fever
- Patients who have testicular torsion typically wake up due to scrotal pain in the middle of the night or in the morning.



# Testicular Torsion

## ➤ Physical Exam

- Fever is uncommon, and usually low-grade if present.
- Lower abdominal tenderness.
- On testicular exam, the patient may have tenderness or swelling.



## ➤ Management

- CBC, UA (infections)
- US of testicle
- STAT ED transfer or urology/surgeon consult

# Clinical Case #3

38 y.o. male patient presents with epigastric pain associated with nausea, vomiting and anorexia. Patient has had these symptoms 4-5 times in the past year. WBC-16, LFTs normal, Amylase and lipase are elevated. What are the two most common etiologies for this patient's diagnosis?

- 
- A. Gallstones and alcohol
  - B. Alcohol and steroids
  - C. Medications and gallstones
  - D. Cancer and infections
  - E. Infections and gallstones

# Acute Pancreatitis

## ➤ Signs & Symptoms:

- Abdominal pain (cardinal symptom): Characteristically dull, boring, and steady; usually sudden in onset and gradually becoming more severe until reaching a constant ache; most often located in the upper abdomen and may radiate directly through to the back
- Nausea and vomiting, sometimes with anorexia
- Diarrhea

## ➤ History of the following:

- Recent operative or other invasive procedures (ERCP)
- Family history of hypertriglyceridemia
- Previous biliary colic and binge alcohol consumption (major causes of acute pancreatitis)

# Acute Pancreatitis

## ➤ Most common etiologies:

- Biliary disease (40%)

- Alcohol (35%)

- Trauma

- Drugs (sulfonamides, tetracycline, steroids, estrogens)

## ➤ Physical Exam

- Fever (76%) and tachycardia (65%); hypotension

- Abdominal tenderness and distention (65%); diminished or absent bowel sounds

- Jaundice (28%)

- Dyspnea (10%); tachypnea; basilar rales, especially in the left lung

# Acute Pancreatitis

- Physical Exam (cont.) – uncommon
  - **Cullen sign** (bluish discoloration around the umbilicus resulting from hemoperitoneum)
  - **Grey-Turner sign** (reddish-brown discoloration along the flanks resulting from retroperitoneal blood dissecting along tissue planes); more commonly, patients may have a ruddy erythema in the flanks secondary to extravasated pancreatic exudate
- IVF, antibiotics and surgical consultation



# Clinical Case #4

45 y.o. female patient presents with 18 hour history of RUQ pain associate with nausea, vomiting and anorexia. WBC-16, AST/ALT/GGT – elevated, amylase and lipase are normal. What is the next best step for treatment of this patient?

A. CT scan of the abdomen

B. GI referral for EGD

C. US of the gallbladder

D. IV Meropenem

E. Avoiding fatty foods, oral antibiotics and 48 hour follow-up

# Biliary Disease

## ➤ Signs & Symptoms:

- RUQ abdominal pain most often postprandial especially after fatty meal. Maybe chronic
- Nausea and vomiting, sometimes with anorexia
- Fevers may indicate infection of GB (**Acute cholecystitis** or **Cholangitis**)
- Jaundice, tea-colored urine or acholic stools (**Choledocholithiasis**)
- Weight loss
- Dehydration



# Biliary Disease

## ➤ Physical Exam

➤ Fever, tachycardia (**Acute cholecystitis, cholangitis**)

➤ Jaundice  
(**Choledocholithiasis, Cholangitis**)

➤ Positive Murphy's sign

## ➤ DDx:

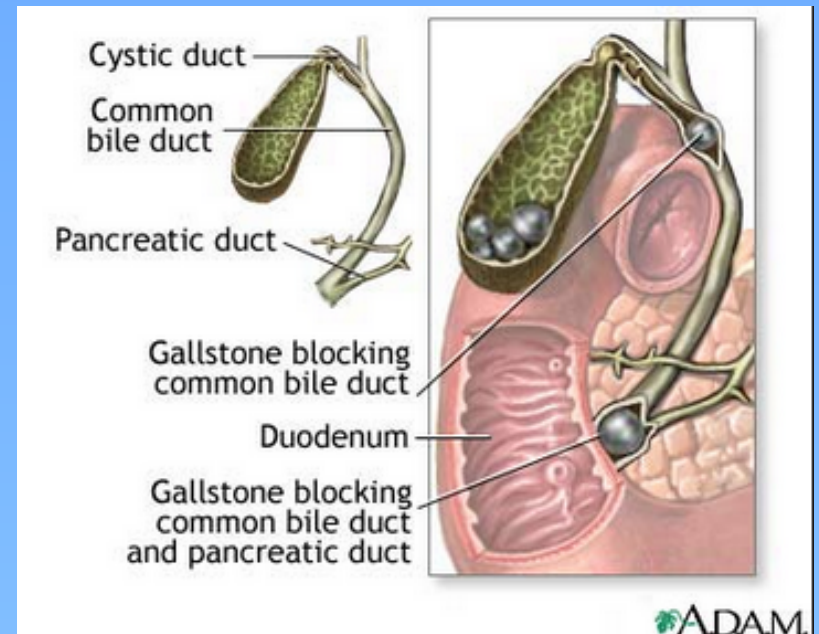
➤ Right lower pneumonia

➤ Hepatitis

➤ Gastritis/duodenitis/GERD/Peptic Ulcer

➤ Pancreatitis

➤ Musculoskeletal

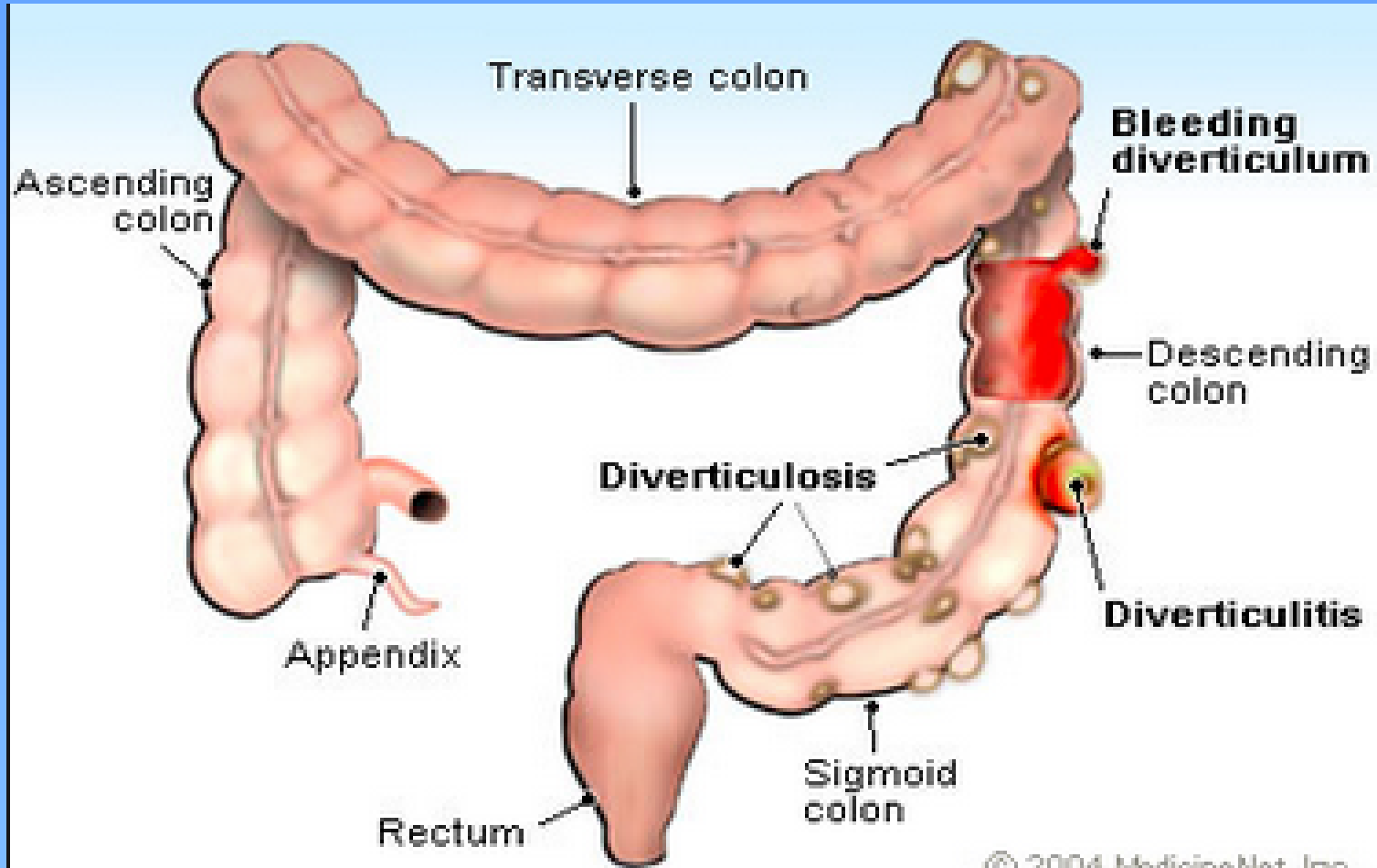


# Clinical Case #5

55 y.o male patient presents with LLQ pain, low grade fevers and mild nausea. PE demonstrates a T99, HR 80 with mild LLQ tenderness and no peritonitis. WBC-15. You suspect mild diverticulitis. What is the NEXT best management for this patient?

- A. Avoid seeds and pain control medications (Toradol)
- B. GI referral for colonoscopy
- C. Routine surgical consultation
- D. CT scan of the abdomen with oral and IV contrast
- E. Oral antibiotics and follow up in 48 hours

# Diverticulitis



## Diverticular Disease

# Diverticulitis

## ➤ Pathophysiology

➤ Feces is trapped in the pouches developed in the wall of the colon which allows bacteria to grow and cause an infection and inflammation that may lead to pressure and perforation.

➤ Possibly due to low fiber diet

## ➤ Signs & Symptoms:

➤ Tenderness, cramps, or pain in the abdomen (usually in the lower left side but may occur on the right) that is sometimes worse when you move.

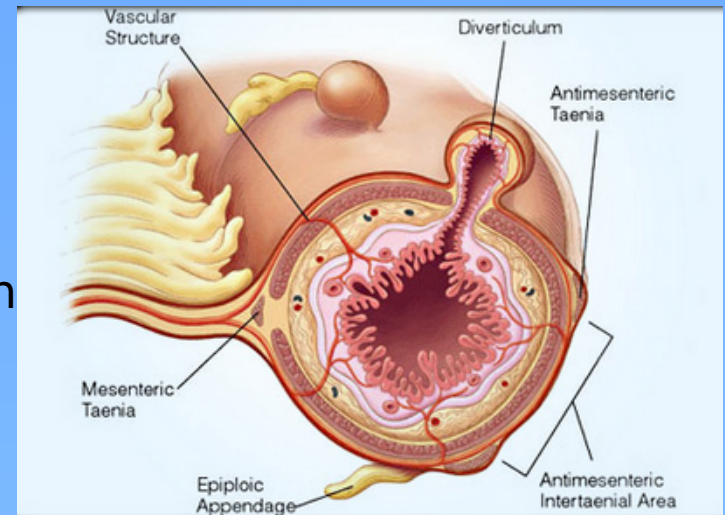
➤ Fever and chills.

➤ A bloated feeling, abdominal swelling, or gas.

➤ Diarrhea or constipation.

➤ Nausea and sometimes vomiting.

➤ Loss of appetite.



# Diverticulitis

## ➤Physical Exam

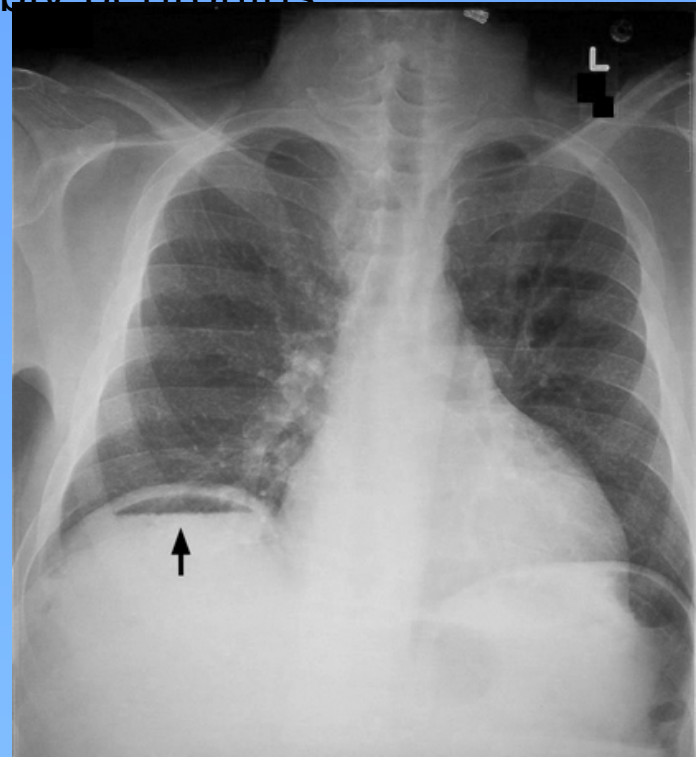
- Fevers, tachycardia possible hypotension (massive perforation or abscess)
- LLQ abdominal tenderness and possibly peritonitis
- Palpable mass if abscess is present

## ➤DDx:

- Infectious
- Constipation
- Renal disease
- Inflammatory Bowel Disease

## ➤Tests

- CBC
- UA
- Fecal occult blood test
- Acute abdominal series



**Free Air - always get an upright film**

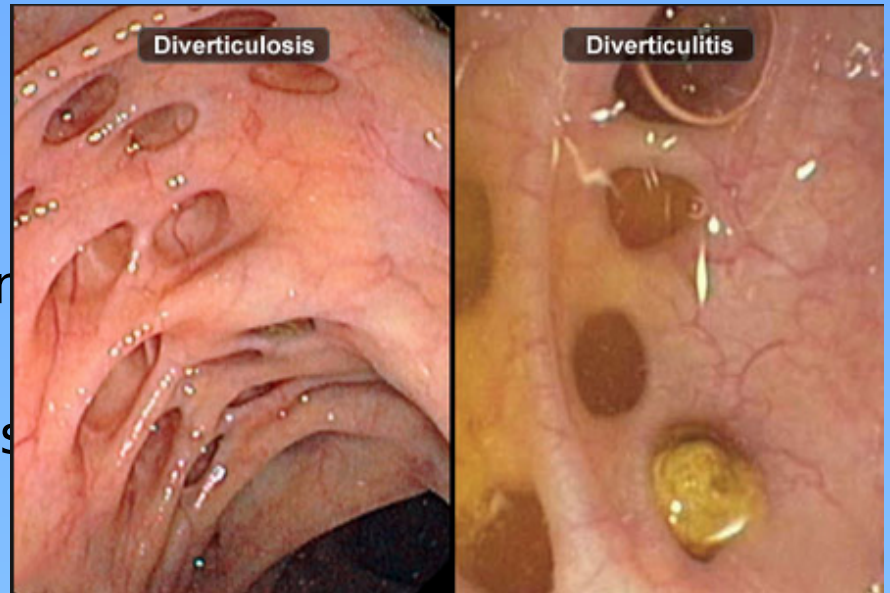
# Diverticulitis

## ➤ Management

- **MILD cases** can be treated with oral antibiotics but **MUST** be followed in 48-72 hours. (Outpatient management)
- **MODERATE OR SEVERE** cases should be referred to the local ED or surgeon for further evaluation for complicated disease (obstruction, abscess, massive perforation or sepsis).
- High fiber diet

## ➤ Follow-up:

- If no recent colonoscopy, or should be refer to a surgeon/gastroenterologist for colonoscopy



# Small Bowel Obstruction

## ➤ Definition and Etiologies:

➤ Blockage of the small bowel or colon due to mechanical obstruction

➤ Common etiologies

➤ Adhesions (#1 cause)

➤ Hernias

➤ Diverticular disease

➤ Hernias

➤ Cancer



Strangulated inguinal hernia

## ➤ Signs & Symptoms:

➤ Cramping and periumbilical abdominal pain that comes and goes.

➤ Nausea and anorexia

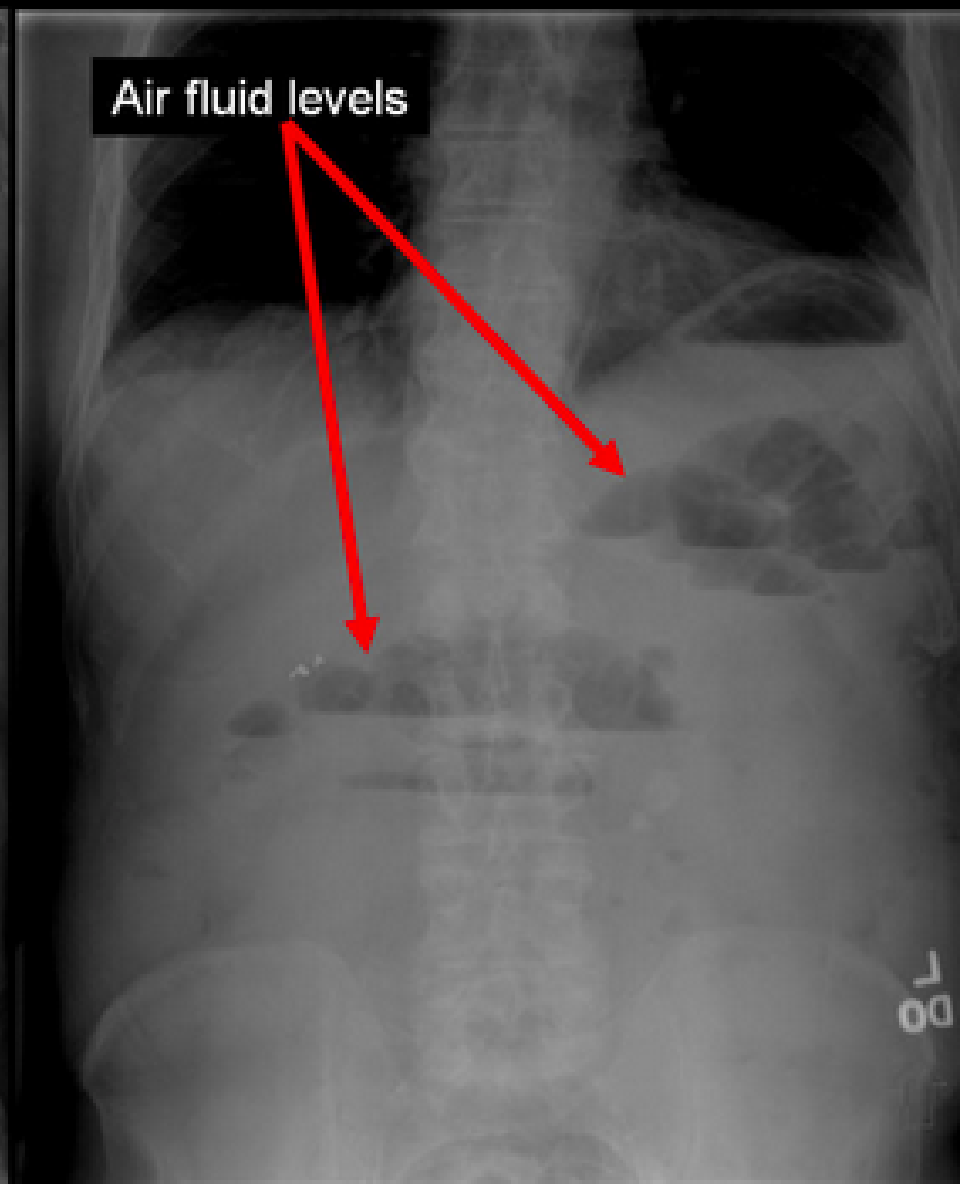
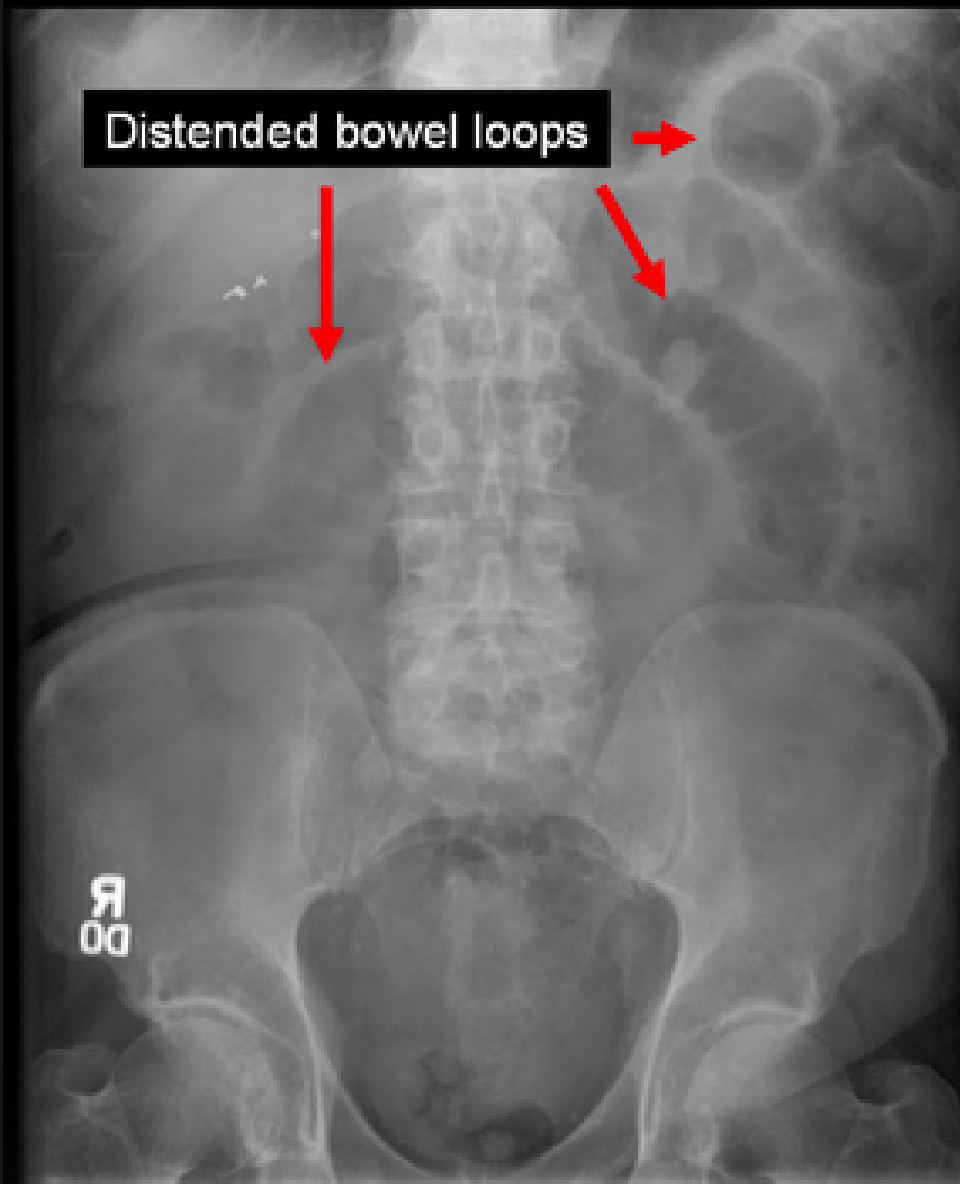
➤ Vomiting. (concerning if **bilious** vomiting)

➤ Bloating and a large, hard belly.

➤ Constipation and a lack of gas, if the intestine is completely blocked.

➤ Diarrhea, if the intestine is partly blocked. (**Partial obstruction**)

# Bowel obstruction (small bowel)



# Small Bowel Obstruction



- Physical Exam
  - Tachycardia (65%); hypotension if perforated and septic
  - Dehydrated
  - Abdominal tenderness and distention (65%); diminished or absent bowel sounds
  - Firm, tender inguinal mass if strangulated hernia is the cause
- **SURGICAL EMERGENCY!**





# Post Test

- Review answers to pre-test case questions given at the start of the meeting



# Question 1- Version A

- Acute appendicitis is best diagnosed by which of the following:
  - a) CT scan of the abdomen
  - b) US of the lower abdomen
  - c) CBC
  - d) Clinical diagnosis
  - e) MRI of the abdomen



# Question 1- Version A

- Acute appendicitis is best diagnosed by which of the following:
  - a) CT scan of the abdomen
  - b) US of the lower abdomen
  - c) CBC
  - d) Clinical diagnosis**
  - e) MRI of the abdomen



# Question 2- Version A

- 30 y.o. female patient presents with right lower abdominal pain for 36 hours associated with nausea, vomiting and anorexia. Which is the MOST important test to obtain?
  - a) CT scan of the abdomen
  - b) US of the lower abdomen
  - c) CBC
  - d) Urine pregnancy test
  - e) Abdominal x-ray



# Question 2- Version A

- 30 y.o. female patient presents with right lower abdominal pain for 36 hours associated with nausea, vomiting and anorexia. Which is the MOST important test to obtain?
  - a) CT scan of the abdomen
  - b) US of the lower abdomen
  - c) CBC
  - d) Urine pregnancy test**
  - e) Abdominal x-ray



# Question 3- Version A

- 19 y.o. thin male patient presents with mid- abdominal pain for 48 hours associated with nausea, vomiting and anorexia. WBC, Amylase and lipase are markedly. What is the most likely etiology?
- a) Gallstones
  - b) Alcohol
  - c) Scorpion bite
  - d) Hyperlipidemia
  - e) Steroids



# Question 3- Version A

- 19 y.o. thin male patient presents with mid- abdominal pain for 48 hours associated with nausea, vomiting and anorexia. WBC, Amylase and lipase are markedly. What is the most likely etiology?
- a) Gallstones
  - b) Alcohol**
  - c) Scorpion bite
  - d) Hyperlipidemia
  - e) Steroids



# Question 4- Version A

- 55 y.o. male patient presents with left lower abdominal pain for 48 hours associated with high-grade fevers, nausea, vomiting and anorexia. Patient has significant tenderness in the lower abdomen. WBC-18, but remaining CBC, LFTs, Chemistry panel and UA are normal. What is the next best step?
  - a) Routine consult to GI for colonoscopy
  - b) Flagyl for 10 days and follow-up patient in clinic afterwards
  - c) Anoscopy in the clinic
  - d) Transfer to local ER for CT scan of the abdomen
  - e) Pain meds and follow-up in 48 hours.



# Question 4- Version A

- 55 y.o. male patient presents with left lower abdominal pain for 48 hours associated with high-grade fevers, nausea, vomiting and anorexia. Patient has significant tenderness in the lower abdomen. WBC-18, but remaining CBC, LFTs, Chemistry panel and UA are normal. What is the next best step?
  - a) Routine consult to GI for colonoscopy
  - b) Flagyl for 10 days and follow-up patient in clinic afterwards
  - c) Anoscopy in the clinic
  - d) Transfer to local ER for CT scan of the abdomen**
  - e) Pain meds and follow-up in 48 hours.



# Question 5- Version A

- 25 y.o. female patient presents with increasing abdominal pain for 8 hours associated with bilious emesis. An abdominal x-ray shows a signs of small bowel obstruction. Which of the following is the likely etiology of her SBO?
  - a) Previous pregnancy
  - b) Use of steroids
  - c) Alcohol
  - d) Excessive straining or constipation
  - e) Prior hysterectomy or abdominal surgery



# Question 5- Version A

- 25 y.o. female patient presents with increasing abdominal pain for 8 hours associated with bilious emesis. An abdominal x-ray shows a signs of small bowel obstruction. Which of the following is the likely etiology of her SBO?
  - a) Previous pregnancy
  - b) Use of steroids
  - c) Alcohol
  - d) Excessive straining or constipation
  - e) Prior hysterectomy or abdominal surgery**



# Question 1- Version B

- A 21 y.o. male patient presents with right lower quadrant pain, nausea, anorexia and low-grade fevers. Exam demonstrates significant guarding and a positive Rovsing's sign. CBC, Chemistry panel, LFTs (Liver Function Tests) and Ultrasound of the abdomen are normal. What is the next best step
  - a) CT scan of the abdomen
  - b) Follow-up in sick call in 48 hours
  - c) Surgical Consultation
  - d) Oral antibiotics and await response
  - e) MRI of the abdomen



# Question 1- Version B

- A 21 y.o. male patient presents with right lower quadrant pain, nausea, anorexia and low-grade fevers. Exam demonstrates significant guarding and a positive Rovsing's sign. CBC, Chemistry panel, LFTs (Liver Function Tests) and Ultrasound of the abdomen are normal. What is the next best step
  - a) CT scan of the abdomen
  - b) Follow-up in sick call in 48 hours
  - c) Surgical Consultation**
  - d) Oral antibiotics and await response
  - e) MRI of the abdomen



# Question 2- Version B

- 40 y.o. female patient presents with right upper abdominal pain for 36 hours associated with nausea, vomiting, anorexia and cola-colored urine. Which is the best test to obtain the diagnosis?
  - a) UA
  - b) Drug screen
  - c) CBC
  - d) Urine pregnancy test
  - e) Liver function tests



## Question 2- Version B

- 40 y.o. female patient presents with right upper abdominal pain for 36 hours associated with nausea, vomiting, anorexia and cola-colored urine. Which is the best test to obtain the diagnosis?
  - a) UA
  - b) Drug screen
  - c) CBC
  - d) Urine pregnancy test
  - e) **Liver function tests**



# Question 3- Version B

- 18 y.o. male patient presents with left upper abdominal pain for 48 hours associated with nausea, vomiting and anorexia. CBC, LFTs, Amylase and lipase are normal. Your working diagnosis is gastritis. What is the next best step in management?
  - a) Stop smoking
  - b) Alcohol cessation
  - c) H2 Blocker (Zantac)
  - d) Proton Pump Inhibitor (Prilosec)
  - e) All of the above



# Question 3- Version B

- 18 y.o. male patient presents with left upper abdominal pain for 48 hours associated with nausea, vomiting and anorexia. CBC, LFTs, Amylase and lipase are normal. Your working diagnosis is gastritis. What is the next best step in management?
  - a) Stop smoking
  - b) Alcohol cessation
  - c) H2 Blocker (Zantac)
  - d) Proton Pump Inhibitor (Prilosec)
  - e) All of the above**



# Question 4- Version B

- 17 y.o. male recruit presents with acute onset of left lower abdominal lasting for 3 hours. Patient has no tenderness in the lower abdomen but significant pain in the left scrotum. No bulge is palpated. WBC-18, but remaining CBC, Chemistry panel and UA are normal. What is the likely diagnosis?
  - a) Diverticulitis
  - b) Inguinal Hernia
  - c) Testicular Torsion
  - d) Epididymitis
  - e) Orchitis



# Question 4- Version B

- 17 y.o. male recruit presents with acute onset of left lower abdominal lasting for 3 hours. Patient has no tenderness in the lower abdomen but significant pain in the left scrotum. No bulge is palpated. WBC-18, but remaining CBC, Chemistry panel and UA are normal. What is the likely diagnosis?
  - a) Diverticulitis
  - b) Inguinal Hernia
  - c) Testicular Torsion**
  - d) Epididymitis
  - e) Orchitis



# Question 5- Version B

- 25 y.o. female patient presents with acute onset of right lower abdominal pain for 6 hours associated with nausea and nonbilious emesis. Her last menstrual cycle was two weeks ago. WBC-14. Chemistry panels, LFTs, UA are normal. UHCG was negative. Which of the following is the likely diagnosis?
  - a) Ectopic pregnancy
  - b) Urinary tract infection
  - c) Appendicitis
  - d) Ovarian Torsion
  - e) Diverticulitis



# Question 5- Version B

- 25 y.o. female patient presents with acute onset of right lower abdominal pain for 6 hours associated with nausea and nonbilious emesis. Her last menstrual cycle was two weeks ago. WBC-14. Chemistry panels, LFTs, UA are normal. UHCG was negative. Which of the following is the likely diagnosis?
  - a) Ectopic pregnancy
  - b) Urinary tract infection
  - c) Appendicitis
  - d) Ovarian Torsion**
  - e) Diverticulitis



### Questions?

Romeo C. Ignacio, Jr. MD, FACS, FAAP  
CAPT MC USN  
Program Director, General Surgery  
Staff Pediatric Surgeon  
Naval Medical Center San Diego  
[romeo.ignacio@med.navy.mil](mailto:romeo.ignacio@med.navy.mil)



# Credits

Originator: Romeo Ignacio, M.D.

Editors: Romeo Ignacio, M.D.



# Upcoming Meetings

- April 30<sup>th</sup> @ 1000-1200
  - Airway Management
  - Airway Lab
  - SAFE testing (alternate date)
- May 27<sup>th</sup> @ 1000-1200
  - Ultrasound (GMOs)
  - Dentistry for the IDC (IDCs)
  - SAFE testing (primary date)
- June 30<sup>th</sup> @ 1000-1200
  - Acute Drug Reactions/Allergies
  - Drug Overdose/Antecdotos + NG Tubes/Gastric Lavage
  - SAFE testing (alternate date)
- July 29<sup>th</sup> @ 1000-1200
  - Trauma
  - Psych Emergencies
- August 27<sup>th</sup> @1000-1200
  - X-ray interpretation (GMOs)
  - Pelvic/speculum exam (IDCs)



# Post Tests

- Acute Pain
- Acute Abdomen
- Q1 Review
- Curriculum Feedback

Please put your name on the Acute Pain and Q1 Review quizzes!

## **Topics Covered**

### **January**

Chest Pain- Dr. Oakley

Triage- LT Feroli

### **February**

Shock- Dr. Mecklenburg

Pulmonary Emergencies- Dr. Powers

### **March**

Acute Pain- Dr. Voogd

Surgical Abdomen- Dr. Ignacio



# CME Information

- Treatment of Acute Pain and Evaluation of Surgical Abdomen
- CME Code (To claim credit online): 7737
- Closing Date (To claim credit online): 1 April 2015
- To complete CME go to NMCSD SEAT SharePoint site and click on MRDSD Waterfront Meeting January 2015 from drop down menu

<http://nmcsd-as-spfe05/sites/dpe/setd/Lists/cmesurvey/Item/newifs.aspx?List=be0f840e%2D0489%2D4b5a%2Db8de%2D9c4cd1a323e5&Web=0901130e%2Dd444%2D45b8%2D8bc7%2D5b9ec10dca77>